

A Guide to the Native Milkweeds of Washington



Milkweeds are a critical part of the monarch butterfly's life cycle. To protect monarchs in western North America, the Xerces Society has launched an initiative to locate milkweed stands that serve as breeding areas for monarchs. Please help by reporting your observations to the Western Monarch Milkweed Mapper:

monarchmilkweedmapper.org

Introduction

This guide was created to support a web-based survey developed to gather information about milkweed stands in the western states that potentially serve as important monarch breeding areas. If you would like to contribute to our understanding of the migration and breeding dynamics of the western monarch by submitting information about milkweed occurrences in your region, you can complete the survey on the Xerces Society's website, at www.xerces.org/milkweedsurvey.

There are three types of milkweed native to Washington. All of these are used as a larval host plant by the monarch butterfly.

Asclepias cryptoceras spp. *davisii* (Davis' milkweed)
Asclepias fascicularis (narrow-leaved milkweed)
Asclepias speciosa (showy milkweed)

A profile of each of these species includes descriptions of flowers, leaves, and seed pods, accompanied by photos and distribution maps. Supporting these profiles is a simple guide

to identifying milkweeds based on their distinctive flowers and fruits. In addition to these native species, we have included a profile of *Asclepias curassavica* (tropical milkweed), a nonnative species that is becoming established in some states. Although it is not yet established in Washington, by looking for it now, we may be able to get an early warning of its arrival in this state.

To document the distribution of available monarch breeding habitat, it is not necessary to distinguish one milkweed species from another. However, if there is a need to collect seed from or monitor populations of any particular milkweed species in the future, it will be useful to have information on the distribution of individual species.

This survey is being conducted by the Xerces Society for Invertebrate Conservation. The Society's milkweed conservation work is supported by the Monarch Joint Venture and the USDA Natural Resources Conservation Service.

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The Xerces Society for Invertebrate Conservation is a nonprofit organization that protects wildlife through the conservation of invertebrates and their habitat. Established in 1971, the Society is a trusted source for science-based information and advice. We collaborate with people and institutions at all levels and our work to protect monarchs, bumble bees and many other species encompasses all landscapes. Our team draws together experts from the fields of habitat restoration, entomology, botany and conservation biology with a single focus—protecting the life that sustains us. To learn more about our work, visit www.xerces.org.

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Acknowledgements

Our thanks go to Priya Shahani, coordinator of the Monarch Joint Venture, and Karen Oberhauser of the University of Minnesota for their advice and guidance with preparing the survey and milkweed guides.
Guide prepared by Brianna Borders.
Editing and layout by Matthew Shepherd.

Cover photos

Top: narrow-leaved milkweed (*Asclepias fascicularis*), © Mary Ellen (Mel) Harte, Bugwood.org; bottom left: monarch (*Danaus plexippus*) adult, © Eric Eldredge; bottom right: monarch caterpillar, © William M. Ciesla, Forest Health Management International, Bugwood.org.

Tips for Milkweed Identification

Unless you are already familiar with the native milkweeds of your region, it's unlikely that you'll be able to identify different species if they are not flowering or bearing fruits. Milkweed flowers and fruits are very distinctive and can be easily recognized, allowing confident identification when they are present.

Flowers

Milkweed flowers are arranged in clusters. Depending on the species, the stalk that bears the flowers can be either erect or drooping. The showy, upper part of each flower, called the **corona**, consists of five hoods, where nectar is stored. The shape of the hoods is variable between species. Five petals, which together are called a **corolla**, form the lower part of the flower and in most species, are bent backwards.

Fruits

Milkweed fruits ("pods") are also very distinctive though they are variable in size and shape between species. When the fruits are mature, they split open lengthwise, releasing the seeds. Each seed is attached to fluffy hairs that aid in wind dispersal.

Milky sap

Milkweeds are named for their milky, latex sap, which oozes from the stems and leaves when plants are injured. Milkweeds are not the only plants that have milky sap, but in combination with the unique flower shape, this can help to positively identify a milkweed plant. To check for the sap, tear off a small piece of leaf to see if it oozes from the torn area. Avoid any contact of the sap with your skin, eyes, or mouth.

Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Pallid milkweed (*Asclepias cryptoceras* ssp. *cryptoceras*): The corona is purple and the corolla is pale green.

Photo: Mary Ellen (Mel) Harte, Bugwood.org



Narrow-leaved milkweed (*Asclepias fascicularis*): The corona is white and the corolla is pink.

Photo: Eric Eldredge, USDA-NRCS



Showy milkweed (*Asclepias speciosa*): This species' fruits have a woolly texture and sometimes have warty projections.

Photo: John Anderson, Hedgerow Farms



Narrow-leaved milkweed (*Asclepias fascicularis*): This species' fruits are hairless and have an elongated, tapered shape.

Asclepias cryptoceras *ssp. davisii*

Davis' milkweed

Distribution in Washington

Found only in the extreme southeast of the state.

Habitat description

Sand, gravel, clay or shale on slopes and hillsides.

Flowering period

April – June

Plant characteristics

Growth form

- Up to 1 foot (30 cm) tall
- Decumbent and low growing, rather than erect

Flower color

- Corona purple
- Corolla pale green

Stems

- Hairless
- Waxy coating gives them a frosted appearance

Leaves

- 1.5 – 3 inches (4 – 8 cm) long
- Nearly as wide as long
- Opposite each other on the stem
- Hairless
- Waxy coating gives them a frosted appearance

Fruits

- 1.5 – 3 inches (4 – 8 cm) long
- Oval-shaped
- Smooth-textured
- Hairless

Note about the photos

There are two subspecies of *A. cryptoceras* in North America, *ssp. cryptoceras* and *ssp. davisii*. Only the latter is recorded in Washington. However, the photos on this page show *ssp. cryptoceras*. The most apparent difference between the two subspecies is in the length and shape of the hoods, but the distinctive color combination of corolla and corona mean that neither subspecies can be confused with other milkweeds in the field.



Source: USDA-NRCS PLANTS Database



Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Photo: Conservation Seeding & Restoration, Inc. Biology Team, csr-inc.com

Asclepias fascicularis

narrow-leaved milkweed

Distribution in Washington

Limited to south-central and southeast of state.

Habitat description

Dry to moist soil in meadows, fields, roadsides, open woods, and along waterways.

Flowering period

June – September

Plant characteristics

Growth form

- Up to 3 feet (90 cm) tall

Flowers

- Corona white
- Corolla pink

Leaves

- 2 – 5 inches (5 – 12 cm) long
- Narrow
- Numerous
- Opposite each other on the stem or in a whorled pattern around the stem

Fruits

- 2 – 4 inches (5 – 10 cm) long
- Narrow
- Smooth-textured
- Hairless



Source: USDA-NRCS PLANTS Database



Photo: John Anderson, Hedgerow Farms



Photo: Mary Ellen (Mel) Harte, Bugwood.org



Photo: Eric Eldredge, USDA-NRCS

Asclepias speciosa

showy milkweed

Distribution in Oregon

Scattered east of the Cascades.

Habitat description

Dry to moist soil in meadows, fields, roadsides, open woods, and along waterways.

Flowering period

June - August

Plant characteristics

Growth form

- Up to 4 feet (120 cm) tall
- Stout and erect
- Sometimes grows in stands of several hundred plants

Flowers

- Corona pink or white
- Corolla pink
- Hoods of corona very elongated; form 5-pointed star

Stems

- Covered in soft hairs, often matted

Leaves

- 3 – 7 inches (8 – 18 cm) long
- Broad (1.5 – 3 inches [4 – 8 cm])
- Opposite each other on the stem
- Covered in soft hairs, often matted

Fruits

- 2 – 3 inches (5 – 8 cm) long
- Covered in dense, woolly hairs
- Some have warty projections



Source: USDA-NRCS PLANTS Database



Photo: Mary Ellen (Mel) Harte, Bugwood.org



Photo: Rod Gilbert

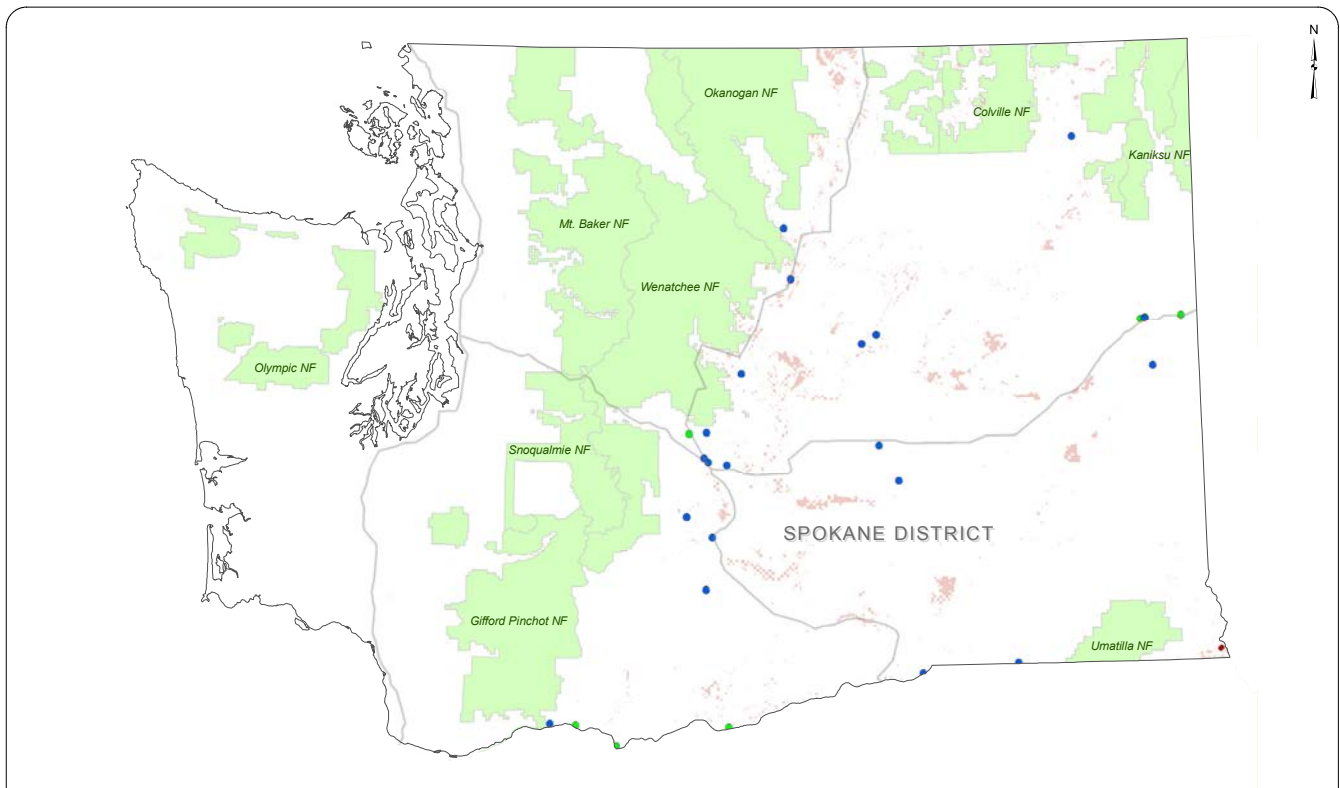


Photo: Eric Eldredge, USDA-NRCS



Photo: Brianna Borders, The Xerces Society for Invertebrate Conservation

Milkweed Distribution in Washington



Milkweed (*Asclepias* spp.) Distribution in Washington

● <i>Asclepias fascicularis</i>	■ BLM Ownership
● <i>A. speciosa</i>	■ USFS Ownership
■ <i>A. cryptoceras</i> ssp. <i>davisii</i>	— Road



Note: Herbarium specimen data provided by: University of Washington Burke Museum (Accessed through PNW Herbaria Portal, www.pnwherbaria.org, 2010-08-09).
A. cryptoceras ssp. *davisii* data source: Washington Natural Heritage Program.

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Asclepias curassavica

tropical milkweed
bloodflower

Tropical milkweed is not native north of Mexico, but, due to its showy flowers and its ability to attract egg-laying monarchs, it has been widely planted in gardens. In Florida, the species has escaped from gardens and become established in natural areas. Scientists are concerned that this nonnative milkweed has negative impacts on monarchs because, unlike most North American native milkweeds, it will have foliage year-round when growing in areas with mild winters and adequate moisture. This can cause monarchs to lay eggs outside of their regular breeding season or persist in areas longer than they normally would, disrupting their migratory cycle. Year-round persistence of milkweed has also been found to result in dramatically higher parasitism rates in monarchs, and thus lower monarch survival. A better understanding of where this milkweed occurs in the landscape may facilitate study of its potential impacts or aid early eradication efforts.

Distribution

Documented in California; the extent of its occurrences in other western states is generally unknown. Also documented in Florida, Hawaii, Louisiana, Tennessee, and Texas.

Habitat description

Typically planted in gardens. Prefers moist soils. Colonizes disturbed sites.

Flowering period

Potentially blooms several times between spring and fall.

Plant characteristics

Growth form

- Up to 3 feet (90 cm) tall

Flowers

- Corona yellow/orange
- Corolla bright red

Leaves

- 5 – 6 inches (13 – 15 cm) long
- Narrow; pointed at both ends
- Opposite each other on the stem

Fruits

- 3 – 4 inches (8 – 10 cm) long
- Spindle shaped, with a smooth texture



Photo: Larry Allain @ USDA-NRCS PLANTS Database



Photo: R.A. Howard @ USDA-NRCS PLANTS Database

References

- Floridata. *Asclepias curassavica* species profile. 1/21/04. Available at http://www.floridata.com/ref/a/ascl_cur.cfm [accessed 11/15/2011]
- Hickman, J. C. (editor). 1993. *The Jepson Manual: Higher Plants of California*. Berkeley: University of California Press. 1,424 pp.
- Hitchcock, C. L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. Se-

- attle: University of Washington Press. 730 pp.
- USDA Natural Resources Conservation Service. 2011. The PLANTS Database (<http://plants.usda.gov>, October 2011). National Plant Data Center, Baton Rouge, LA 70874-4490, USA.